

ABSTRACT

Remote activation mechanism for equipment hold  
down and release, composed of a fixed base (1); a disk  
with capacity to rotate (2); a ring (3) subdivided in  
5 independent segments; a helical torsion spring (4)  
mounted around the segmented, being in one end joined to  
the fixed base (1) and the other end to the disk (2); a  
retainer (5) to attach the hardware, that passes through  
the fixed base (1) and has means to be blocked by the  
10 segmented ring (3); a disk blocking system; and a disk  
liberation system (2). The disk (2) can potentially  
rotate from a position in which the helical torsion  
spring (4) is loaded hugging radially the segmented ring  
(3), up to a position in which the helical torsion spring  
15 (4) is unloaded, allowing the ring segments move radially  
away to release the retainer (5). The disk blocking  
system can be based on rollers or balls (12) with  
possibility of being inserted partially in disk grooves  
or in crown grooves. The disk (2) liberation system  
20 consists of an actuator that can be based on the use of  
shape memory alloy wire.

FIG. 2.

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